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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,471	04/21/2006	Frank J. M. Benschop	2003P02652WOUS	1170
38107 7590 12/19/2011 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P. O. Box 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
BOR, HELENE CATHERINE				
ART UNIT		PAPER NUMBER		
3768				
NOTIFICATION DATE		DELIVERY MODE		
12/19/2011		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary**Application No.**

10/595,471

Applicant(s)

BENSCHOP ET AL.

Examiner

HELENE BOR

Art Unit

3768

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 3-5, 7-10, 12, 13 and 15 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 3-5, 7-10, 12, 13 and 15 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-SB-005)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 4-5, 7 & 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamiyama (US Patent Application No. 2002/0035326 A1).

Claim 15: Kamiyama teaches a diagnostic imaging system (Abstract). Kamiyama teaches a control system to control the execution of operational items by the diagnostic imaging system (Page 4, Para 0044 & Figure 1, Element 32). Kamiyama teaches a user interface (inherent as evidenced by Figure 1, Element 13 & 28; as disclosed user interaction with the system Page 6, Para 0070) coupled to the control system (Page 4, Para 0048). Kamiyama teaches the user interface including a scheduler module (Page 4, Para 0051 & Figure 2, Element 326, 328 & 320) which generates an ordered selection [sequence editing] of operational items [processings] autonomously ordered by the scheduler module for execution under control of the control system (Page 4, Para 0044, 0047 & 0048). Kamiyama teaches the ordered selection being generated by arranging the operational items in said ordered selection of operational items based on parameter [operational information/time information] settings of the operational items (Page 4, Para 0051). Kamiyama teaches wherein the scheduler module is configured to issue instructions [interacting/notifying] to the user prompted by the operational items

during the execution of the operational items (Page 5, Para 0067 & Page 4, Para 0041 & 0053). Kamiyama teaches wherein the scheduler module (Figure 2, Element 326, 328 & 320) releases [read out] operational items to the execution list (Figure 2, Element 324) according to the ordered selection (Page 4, Para 0049-0500) and provides progress information to the user interface during a diagnostic imaging session related to the way the execution of operational items is advancing in the diagnostic imaging session in progress (Page 4, Para 0048 & Figure 2, Element 28). Kamiyama teaches where the scheduler module support an editing mode [selectable] in which an operator can edit the autonomously ordered selection of operational items (Page 6, Para 0080 and Page 7, Para 0098).

Claim 4: Kamiyama teaches wherein the scheduler module is capable of releasing operational items in dependence of successful completion of preceding operational items of the ordered selection (Page 4, Para 0049-0500).

Claim 5: Kamiyama teaches wherein the scheduler module is provided with a memory (Page 4, Para 0046) in particular a database to store scan schedules (Figure 2, Element 322) with a browser [window] (Page 7, Para 0091).

Claim 7: Kamiyama teaches wherein the scheduler module is arranged to make available to the user interface a description of the operational item being released to the execution list (Page 4, Para 0049 & Page 5, Para 0062-0063; for example *requests entry of an administration start signal*).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 3, 8-9 & 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bis et al. (US Patent No. 6,493,571) and further in view of Kamiyama (US Patent Application No. 2002/0035326 A1).

Claim 9 & 12: Bis teaches a magnetic resonance imaging system comprising a displaceable patient support (Col. 3, Line 42-47). Bis teaches wherein the control system is set up to displace the patient support among various imaging stations and conduct several different magnetic resonance imaging sequences at each individual imaging station [patient positions] (Abstract and Col. 1, Line 15-28). The teachings of Bis is a the control system capable of grouping all image acquisition sequences to be

performed at each individual imaging station together and performing all image acquisition sequences to be performed at each individual imaging station together before the patient support is moved to a next station of the various imaging stations (Figure 8).

Bis teaches a scheduler (Figure 8, Element 100) but fails to teach an automatically arrangeable one. However, Kamiyama teaches a control system to control the execution of operational items by the diagnostic imaging system (Page 4, Para 0044 & Figure 1, Element 32). Kamiyama teaches a user interface (inherent as evidenced by Figure 1, Element 13 & 28; as disclosed user interaction with the system Page 6, Para 0070) coupled to the control system (Page 4, Para 0048). Kamiyama teaches the user interface including a scheduler module (Page 4, Para 0051 & Figure 2, Element 326, 328 & 320) which generates an ordered selection [sequence editing] of operational items [processings] autonomously ordered by the scheduler module for execution under control of the control system (Page 4, Para 0044, 0047 & 0048). Kamiyama teaches the ordered selection being generated by arranging the operational items in said ordered selection of operational items based on parameter [operational information/time information] settings of the operational items (Page 4, Para 0051) in order to provide assistance to the operator (Page 1, Para 003).

It would have been obvious to one of ordinary skill in the art to modify the system of Bis to include the features as taught by Kamiyama in order to provide assistance to the operator (Page 1, Para 003).

Kamiyama teaches wherein the scheduler module is arranged to issue an instruction to the user prompted by execution of an operational item (Page 4, Para 0048 & 0053). Kamiyama fails to teach coils. However, Bis teaches such a feature (Claim 3) in order to obtain high resolution images (Col. 2, Line 49-54).

It would have been obvious to one of ordinary skill in the art to modify the system of Kamiyama to include the coil (Claim 3) as taught by Bis in order to obtain high resolution images (Col. 2, Line 49-54).

Claim 3: Kamiyama teaches wherein the control system controls the execution of operational items on the basis of an execution list (Page 4, Para 0044 & Figure 1, Element 32) and scheduler (Figure 2, Element 326, 328 & 320) releases [read out] operational items according to the ordered selection (Page 4, Para 0049-0500).

Claim 8: Kamiyama teaches wherein the scheduler module is arranged to provide progress information to the user interface, said progress information being related to the way the execution of operational items is advancing (Page 4, Para 0028).

Claim 13: Kamiyama teaches wherein the scheduler module is arranged to issue an instruction [notification] to the user prompted by execution of an operational item calling for infusion of contrast agent (Claim 15).

7. Claims 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamiyama (US Patent Application No. 2002/0035326 A1) and further in view of Becker (US Patent No. 6,904,161).

Claim 10: Kamiyama fails to teach an MRI system. However Becker teaches wherein the diagnostic imaging system is a magnetic resonance imaging system as a known alternative within the imaging diagnostic art (Col. 1, Line 20-30).

It would have been obvious to one of ordinary skill in the art to modify the system of Kamiyama to include the features as taught by Becker as a known alternative within the imaging diagnostic art (Col. 1, Line 20-30).

Response to Arguments

8. Applicant's arguments filed 09/23/2011 have been fully considered but they are not persuasive. The Applicant submitted arguments that there is no fair suggestion of conducting several different magnetic resonance imaging sequences at each individual imaging station. Instead the Applicant argues Bis teaches only a single scan at each station. The Examiner respectfully disagrees. For example Bis lays out in Claim 9 multiple scans at the same imaging station by performing a first and second scan sequence of the same body portion [imaging station]. Further the Examiner contends that the MRI can perform different types of MRI techniques (Col. 6, Line 62-63) and while Bis admits within his description he only mentions using one sequence; other imaging sequences can be implemented (Col. 9, Line 19-22). Bis also teaches imaging at the same imaging station at different orientations (Col. 7, Line 24) which Bis explains required different imaging parameters with changing an orientation and center of data acquisition (Col. 6, Line 35-40). The Examiner contends there is nothing within Bis that prevents the MRI from conducting several different MRI imaging sequences at each

individual imaging station. The Examiner would also point out that MR angiography that is disclosed in Bis is also the same procedure as disclosed by the Applicant (Page 2, Line 16-20). Thus the Examiner disagrees with MR angiography as being a feature that limits the device to single scans at each imaging station.

The Applicant dismissed the combination of Bis and Kamiyama due to Kamiyama as not being related to MR. Kamiyama was not relied upon for teachings regarding MR. Within the art it is well understood that both MRI and ultrasound systems require a control interface or system. Kamiyama relates to Bis as both disclose details relating to their respective control interface and control system and the obvious teachings from the combination.

The Applicant submitted arguments that Bis does not disclose or fairly suggest a scheduler to module to issue instructions to the user...including an instruction to the user prompted by execution of an operational item calling for applying a surface RF coil. The Examiner respectfully disagrees. Kamiyama was relied on for providing the instruction to the user and while the RF coils do not move relative to the MRI machine the coils move relative to the patient via the movable table. In Bis the coils are applied when the table is positioned relative to the posterior and anterior coils (Col. 5, Line 50-57). Thus Kamiyama teaches issuing instructions (Claim 15) to the user and Bis teaches applying the coils as an act that be instructed (Col. 5, Line 50-57).

The Applicant submitted arguments that Kamiyama does not fairly suggest the wherein an operator can edit the autonomously ordered selection of operational items. The Applicant asserts that Figure 7 is for inspection only. The Examiner respectfully

disagrees as Kamiyama discloses the workflow [operational items] as selectable (Page 6, Para 0800). Further Kamiyama describes how the workflow can be selected [edited] by the operator to enter a rehearsal function and certain activities are selected by the operator (Page 7, Para 0098).

The rejection is deemed proper and is hereby maintained.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELENE BOR whose telephone number is (571)272-2947. The examiner can normally be reached on M-T 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (571)272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. B./
Examiner, Art Unit 3768

/LONG V. LE/
Supervisory Patent Examiner, Art Unit 3768